Perspectives on Women in IT: Behind and Beyond the Numbers

Cheryl B. Leggon, Associate Professor
School of Public Policy
Georgia Institute of Technology
Women in IT - Contexts

- Women hold
  - 56% of all professional jobs in the US
  - but 25% of IT jobs

- Only 11% of executives at Fortune 500 tech companies are women -- YET
  - Tech companies with more women managers have a 34% higher return on investment
  - Women’s presence on technical teams increases teams’ collective problem-solving ability and creativity
Most computing occupations are losing women

<table>
<thead>
<tr>
<th>OCCUPATIONAL CLASSIFICATION</th>
<th>2000</th>
<th>2005</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations research analysts</td>
<td>51%</td>
<td>50%</td>
<td>47%</td>
</tr>
<tr>
<td>Database administrators</td>
<td>43%</td>
<td>33%</td>
<td>35%</td>
</tr>
<tr>
<td>Computer support specialists</td>
<td>35%</td>
<td>33%</td>
<td>27%</td>
</tr>
<tr>
<td>Computer scientists and systems analysts</td>
<td>34%</td>
<td>30%</td>
<td>27%</td>
</tr>
<tr>
<td>Network systems and data communications analysts</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Computer programmers</td>
<td>26%</td>
<td>26%</td>
<td>20%</td>
</tr>
<tr>
<td>Network and computer systems administrators</td>
<td>23%</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Computer software engineers</td>
<td>24%</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td>Computer hardware engineers</td>
<td>22%</td>
<td>11%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Leavers and Stayers

- In the private sector, women leave computing at twice the rate of their male peers
- Women’s “quit rate” in technology is greater than in other S&E fields
- Despite job security and good salaries, 56% of women in tech companies leave at mid-level point (10-20 years) in their careers
- 20% leave the workforce altogether
- However, most of these women remain in the workforce—in a different capacity
  - 49% stay in IT (public sector OR self-employed)
  - 31% move to non-technical field
Women in IT: Leavers & Stayers (%)
Few women in leadership roles in industry

- Among CEOs of Fortune 500 companies, 3% were female (2008)
- In Fortune “technical” companies, women held
  - 10% of corporate officer positions
  - 11% of board of director positions
- Yet 94% of Americans said they feel comfortable with a women as the head of a large technical company (Pew Research Center Survey)
The female percentage of computing faculty has increased at all ranks since 1995. Still, the higher the faculty rank, the fewer the women.
Women as Tech Entrepreneurs

- In 2009, 40% of private companies in the US were majority-owned by women
- HOWEVER, estimates of the percentage of start-ups majority-owned by women are around 8%
Women and Innovation: 1980 to 2005

- Women held on average 4.7% of all US-invented US IT patents
- US IT patenting increased approximately 6-fold
- Female US IT patenting increased 20-fold
Female patenting increased, while women in computing decreased.
Resources:
Data, Initiatives, Policy & Practices

- National Center for Women & Information Technology (NCWIT) [www.ncwit.org](http://www.ncwit.org)

- Computing Research Association (CRA) [www.cra.org](http://www.cra.org)

- Anita Borg Institute (ABI) [www.anitaborg.org](http://www.anitaborg.org)

- Solutions major companies are trying [http://app.post.hbsp.harvard.edu/athena/athena2/index.html](http://app.post.hbsp.harvard.edu/athena/athena2/index.html)